

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
TAKU TAKEISHI ET AL : ATTN: APPLICATION DIVISION
SERIAL NO: NEW APPLICATION :
FILED: HEREWITH :
FOR: COMPOSITE SUBSTRATE AND EL
DEVICE USING THE SAME

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend this application as follows.

IN THE CLAIMS

Please delete the following new Claims:

9. (New) The composite substrate of claim 1, wherein said dielectric layer is a sintered ceramic body composed mainly of barium titanate (BaTiO₃).
10. (New) The composite substrate of claim 1, wherein said substrate has a coefficient of thermal expansion of about 12 to 18 ppm/K.
11. (New) The composite substrate of claim 2, wherein said substrate is composed mainly of magnesia.

12. (New) The composite substrate of claim 1, wherein the electrode is a metallic electrode comprising palladium, rhodium, iridium, rhenium, ruthenium, platinum, silver, gold, tantalum, nickel, chromium or titanium.

13. (New) The composite substrate of claim 1, wherein the electrode is a metallic electrode comprising Pd, Pt, Au, Ag or an alloy thereof.

14. (New) The EL device of claim 7, wherein the second electrode is a transparent electrode of ITO or IZO.

15. (New) The EL device of claim 14, wherein said ITO comprises a proportion of SnO_2 to In_2O_3 of from 1 to 20% by weight.

16. (New) The EL device of claim 14, wherein said IZO comprises a proportion of ZnO to In_2O_3 of about 12 to 32% by weight.

17. (New) The EL device of claim 14, wherein the second electrode is silicon-based.

18. (New) The EL device of claim 17, wherein the silicon-based electrode comprises polycrystalline silicon (p-Si), amorphous silicon (a-Si) or single crystal silicon.

19. (New) The EL device of claim 17, wherein said silicon-based electrode comprises a dopant to impart conductivity.

20. (New) The EL device of claim 19, wherein said dopant comprises B, P, As, Sb or Al in an amount of about 0.001 to 5 at.%.

21. (New) The EL device of claim 14, wherein said second electrode has a resistivity of up to $1 \Omega\cdot\text{cm}$.

22. (New) The EL device of claim 21, wherein said second electrode has a resistivity of from about 0.003 to $0.1 \Omega\cdot\text{cm}$.

23. (New) The EL device of claim 7, wherein said light emitting layer comprises a phosphor.

24. (New) The EL device of claim 23, wherein said phosphor is a sulfide phosphor.

25. (New) The EL device of claim 24, wherein said sulfide phosphor is a ZnS phosphor.

REMARKS

New Claims 9-25 have been added. Hence, Claims 1-25 are now active in this case.

Applicants have added claims, which are all fully supported by the claims and disclosure as originally filed. No new matter has been added.

Accordingly, it is believed that this application is now in condition for examination on the merits.

Favorable consideration is earnestly solicited.

Respectfully submitted,

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IN THE CLAIMS

Claims 9-25 (New).--